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# Carleton University

Presentation to  
the Committee on  
University Affairs

December, 1970







CARLETON UNIVERSITY

Presentation to the Committee on University Affairs

December, 1970



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ITEM 1

REVIEW OF CURRENT PROGRAMS





## COORDINATION WITH OTHER PROVINCIALY-ASSISTED UNIVERSITIES

### GENERAL

Carleton's efforts to coordinate program offerings with other provincially assisted universities in the past year have included specific arrangements with the University of Ottawa, both formal and informal; and more general discussions and arrangements among departments at the province-wide level.

### AT THE UNDERGRADUATE LEVEL

An agreement has been concluded with the University of Ottawa which has effect as of 1970 Fall Registration. It provides for undergraduate students, in the second or more senior year, and in a major or honours program, who wish to take courses at the other university. Each student is allowed one course during any regular university session. The permission of both the home and the host department is required to effect the exchange.

A number of Departments including English, Biology, Geology and Mathematics have been cooperating with their counterparts at the University of Ottawa in order to avoid needless duplication of undergraduate courses, especially at the fourth year honours level. As well our Civil Engineering Division provides a course for University of Ottawa students and the latter reciprocates by providing a course for Carleton students.

On the Province-wide level a number of Departments including, for example, German, Geography and most Science Departments have been meeting to allocate priorities and generally further cooperation.

### AT THE GRADUATE LEVEL

An agreement affecting graduate students was also concluded with the University of Ottawa. It enables a graduate student at one university to follow, during any one university term, one course at the other university.

The visiting graduate student is admitted to the host university on acceptance by the Chairman of the host department, and he must obtain as well, approval of the Dean of Graduate Studies at his home university. The home university will accept the grade assigned by the host university.





The Faculty of Engineering has made special efforts to cooperate with the University of Ottawa so as to encourage as much complementarity as possible. The departments of Spanish, Geography, Chemistry, Geology, Mathematics and Physics have all made extra efforts towards collaboration with the University of Ottawa through a real strengthening of informal relationships.

As well, the Faculty of Engineering has held important preliminary conversations with Queen's University concerning the establishment of an Institute for Studies in Telecommunications. Already informal exchanges of students, research projects and expertise have taken place and proven fruitful.

The Department of Sociology and Anthropology has had preliminary discussions with the Sociology Department at Queen's concerning the complementarity of their two graduate programs. It is hoped that in the near future graduate students from either institution will be participating in graduate seminars offered at the institution other than the one where they are registered for a degree.

Graduate programs generally are being designed with great concern for their relation to other programs both in the province and in the country as a whole. Specifically, the Departments of English, French, Psychology, Chemistry and Mathematics have brought special concern that their programs compliment those being offered and proposed in sister institutions.





GRADUATE ENROLMENT DATA

GENERAL

The detailed presentation of the graduate enrolment data is given in subsequent tables as follows:

- |          |  |
|----------|--|
| CUA-70-A | Distribution of Graduate Students by Discipline Area and Citizenship                 |
| CUA-70-B | Distribution of New Registered Graduate Students by Discipline Area and Citizenship  |
| CUA-70-C | Graduate Degrees Awarded or to be Awarded by Discipline Area.                        |
| CUA-70-D | Projected Graduate Enrolment by Discipline Area.                                     |
| CUA-70-E | Survey of Annual Financial Resources for the Support of Full Time Graduate Students. |



CARLETON UNIVERSITY  
GRADUATE ENROLMENT DATA

DISTRIBUTION OF GRADUATE STUDENTS (FULL-TIME AND PART-TIME) BY DISCIPLINE AREA & CITIZENSHIP

Canadian		Landed		Foreign												Sub-total		TOTAL
		Immigrant		United States		United Kingdom		Europe		Asia		Africa		Other		Foreign		
69/70	70/71	69/70	70/71	69/70	70/71	69/70	70/71	69/70	70/71	69/70	70/71	69/70	70/71	69/70	70/71	69/70	70/71	70/71
349	357	50	79	9	5	8	5	3	4	32	25	9	11	4	4	68	54	467
60	63	18	44	3	1	2	1	0	0	22	6	4	3	1	2	32	13	110
409	420	68	123	12	6	10	6	3	4	57	31	13	14	5	6	100	67	577
224	214	52	49	2	0	2	1	0	0	13	2	0	1	3	2	20	6	296
22	27	9	6	1	1	0	0	0	0	1	0	1	0	0	0	3	1	34
246	241	61	55	3	1	2	1	0	0	14	2	1	1	3	2	23	7	330
50	49	12	9	0	0	3	1	1	1	0	1	0	0	1	0	5	3	67
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	49	12	9	0	0	3	1	1	1	0	1	0	0	1	0	5	3	67
29	34	8	15	0	0	0	0	1	0	0	0	0	0	1	0	2	0	39
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	34	8	15	0	0	0	0	1	0	0	0	0	0	1	0	2	0	39
15	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	16
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	16
16	11	2	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	19
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	11	2	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	19
188	179	17	23	8	4	2	3	1	3	3	4	4	2	2	2	20	18	225
24	28	6	13	2	1	1	0	0	0	1	1	2	2	0	1	6	5	36
212	207	23	36	10	5	3	3	1	3	4	5	6	4	2	3	26	23	261
49	46	8	9	1	0	1	1	0	0	0	0	0	0	0	2	2	3	59
1	6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
50	52	8	9	1	0	1	1	0	0	0	0	1	0	0	2	3	3	61

AGGREGATE FIGURES

Full-Time: - Master's  
- Doctoral  
- Total

Part-Time: - Master's  
- Doctoral  
- Total

BREAKDOWN BY DISCIPLINE AREA

HUMANITIES (Lang. & Lit.)

Full-Time: - Master's  
- Doctoral  
- Total

Part-Time: - Master's  
- Doctoral  
- Total

HUMANITIES (History, etc.)

Full-Time: - Master's  
- Doctoral  
- Total

Part-Time: - Master's  
- Doctoral  
- Total

SOCIAL SCIENCES (General)

Full-Time: - Master's  
- Doctoral  
- Total

Part-Time: - Master's  
- Doctoral  
- Total





# CARLETON UNIVERSITY

## GRADUATE ENROLMENT DATA

### DISTRIBUTION OF GRADUATE STUDENTS (FULL-TIME AND PART-TIME) BY DISCIPLINE AREA & CITIZENSHIP

Canadian		Landed		Foreign										Sub-total		TOTAL			
				United States		United Kingdom		Europe		Asia		Africa					Other		
		Immigrant		69/70		70/71		69/70		70/71		69/70		70/71		69/70		70/71	
69/70		70/71		69/70		70/71		69/70		70/71		69/70		70/71		69/70		70/71	
SOCIAL SCIENCES (Regional etd.)																			
Full-Time:	- Master's	21	31	3	3	1	0	1	1	0	0	0	0	0	0	2	1	26	35
	- Doctoral	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	- Total	21	31	3	3	1	0	1	1	0	0	0	0	0	0	2	0	26	35
Part-Time:	- Master's	8	5	0	2	0	0	0	0	0	0	0	0	0	0	0	0	8	7
	- Doctoral	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	- Total	8	5	0	2	0	0	0	0	0	0	0	0	0	0	0	0	8	7
PHYSICAL SCIENCES																			
Full-Time:	- Master's	19	19	9	13	0	1	1	0	0	0	9	4	0	0	10	5	38	37
	- Doctoral	13	9	7	15	0	0	0	0	0	0	8	1	0	0	8	1	28	25
	- Total	32	28	16	28	0	1	1	0	0	0	17	5	0	0	18	6	66	62
Part-Time:	- Master's	8	4	2	4	0	0	0	0	0	0	2	0	0	0	2	0	12	8
	- Doctoral	3	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4	6
	- Total	11	9	3	5	0	0	0	0	0	0	2	0	0	0	2	0	16	14
MATHEMATICAL SCIENCES																			
Full-Time:	- Master's	13	9	1	4	0	0	0	0	0	0	0	0	0	0	0	0	14	13
	- Doctoral	2	0	0	2	0	0	0	0	0	0	1	1	1	1	3	2	5	4
	- Total	15	9	1	6	0	0	0	0	0	0	1	1	1	1	3	2	19	17
Part-Time:	- Master's	3	4	1	2	0	0	0	0	0	0	4	1	0	0	4	1	8	7
	- Doctoral	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
	- Total	3	6	2	2	0	0	0	0	0	0	4	1	0	0	4	1	9	9
ENGINEERING																			
Full-Time:	- Master's	18	25	5	20	0	0	0	0	1	0	20	12	4	8	25	20	48	65
	- Doctoral	10	12	4	8	0	0	1	0	0	0	7	3	1	1	9	4	23	24
	- Total	28	37	9	28	0	0	1	0	1	0	27	15	5	9	34	24	71	89
Part-Time:	- Master's	52	41	25	12	0	0	0	0	0	0	4	1	0	0	4	1	81	54
	- Doctoral	18	14	6	4	0	0	0	0	0	0	1	0	0	0	1	0	25	18
	- Total	70	55	31	16	0	0	0	0	0	0	5	1	0	0	5	1	106	72
LIFE SCIENCES																			
Full-Time	- Master's	15	17	0	4	0	0	0	0	0	0	0	0	0	0	0	1	15	22
	- Doctoral	11	14	1	6	1	0	0	1	0	0	5	0	0	0	6	1	18	21
	- Total	26	31	1	10	1	0	0	0	0	0	5	0	0	0	6	2	33	43
Part-Time:	- Master's	3	8	1	0	1	0	0	0	0	0	2	0	0	1	4	0	8	8
	- Doctoral	0	0	1	1	1	1	0	0	0	0	0	0	0	0	1	1	2	2
	- Total	3	8	2	1	2	1	0	0	0	0	2	0	0	1	5	1	10	10





1. Does not include "qualifying year" students (as this term is defined in the Report on the Counting of Graduate Students).
2. Enrollment basis is Student numbers enrolled: "As at" December 1st of each year.
3. Report for 1970-71 is the latest estimate available of 1970-71 actuals.  
An updated report incorporating December 1st actuals will be submitted by no later than January 1st, 1971.
4. Discipline areas are as defined in "Survey of Citizenship of Graduate Students Enrolled in Master's and Doctoral Degree Programmes at Ontario Universities in 1969-70" (C.P.U.O. Research Division, May 11, 1970).



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CARLETON UNIVERSITY  
GRADUATE ENROLMENT DATA

DISTRIBUTION OF NEW REGISTERED GRADUATE STUDENTS (FULL-TIME AND PART-TIME) BY DISCIPLINE AREA & CITIZENSHIP

Canadian			Landed Immigrant	United States	United Kingdom	Europe	Asia	Africa	Other	Sub-Total	TOTAL
1970-71			1970-71	1970-71	1970-71	1970-71	1970-71	1970-71	1970-71	1970-71	1970-71
PHYSICAL SCIENCES	- Master's	8	5	1	0	0	2	0	0	3	16
	- Doctoral	6	6	0	0	0	1	0	0	1	13
	- Total	14	11	1	0	0	3	0	0	4	29
MATHEMATICAL SCIENCES	- Master's	0	1	0	0	0	0	0	0	0	1
	- Doctoral	0	0	0	0	0	0	0	0	0	0
	- Total	0	1	0	0	0	0	0	0	0	1
ENGINEERING	- Master's	7	2	0	0	0	0	0	0	0	9
	- Doctoral	0	0	0	0	0	1	0	0	1	1
	- Total	7	2	0	0	0	1	0	0	1	10
LIFE SCIENCES	- Master's	0	3	0	0	0	0	0	0	0	3
	- Doctoral	0	0	0	0	0	0	0	0	0	0
	- Total	0	3	0	0	0	0	0	0	0	3
HEALTH SCIENCES	- Master's	14	6	0	0	0	6	5	0	11	31
	- Doctoral	1	3	0	0	0	0	1	0	1	5
	- Total	15	9	0	0	0	6	6	0	12	36
PHYSICAL SCIENCES	- Master's	8	2	0	0	0	0	0	0	0	10
	- Doctoral	1	1	0	0	0	0	0	0	0	2
	- Total	9	3	0	0	0	0	0	0	0	12
MATHEMATICAL SCIENCES	- Master's	5	1	0	0	0	0	0	0	0	6
	- Doctoral	4	0	0	0	0	0	0	0	0	4
	- Total	9	1	0	0	0	0	0	0	0	10
ENGINEERING	- Master's	3	0	0	0	0	0	0	0	0	3
	- Doctoral	0	0	0	0	0	0	0	0	0	0
	- Total	3	0	0	0	0	0	0	0	0	3
LIFE SCIENCES	- Master's	3	0	0	0	0	0	0	0	0	3
	- Doctoral	0	0	0	0	0	0	0	0	0	0
	- Total	3	0	0	0	0	0	0	0	0	3
HEALTH SCIENCES	- Master's	3	0	0	0	0	0	0	0	0	3
	- Doctoral	0	0	0	0	0	0	0	0	0	0
	- Total	3	0	0	0	0	0	0	0	0	3





CARLETON UNIVERSITY  
GRADUATE ENROLMENT DATA

## DISTRIBUTION OF NEW REGISTERED GRADUATE STUDENTS (FULL-TIME AND PART-TIME) BY DISCIPLINE AREA &amp; CITIZENSHIP

Canadian	Landed Immigrant	United States	United Kingdom	Europe	Asia	Africa	Other	Sub-Total	TOTAL
1970-71	1970-71	1970-71	1970-71	1970-71	1970-71	1970-71	1970-71	1970-71	1970-71
10	1	0	0	0	3	1	1	5	16
0	0	0	0	0	0	0	0	0	0
10	1	0	0	0	3	1	1	5	16
16	0	0	0	0	0	0	0	0	16
0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	16

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EDUCATION

Full-time:  
- Master's  
- Doctoral  
- Total

Part-time:  
- Master's  
- Doctoral  
- Total

BUSINESS

Full-time:  
- Master's  
- Doctoral  
- Total

Part-time:  
- Master's  
- Doctoral  
- Total

OTHER

Full-time:  
- Master's  
- Doctoral  
- Total

Part-time:  
- Master's  
- Doctoral  
- Total

- Notes: (1) Does not include "qualifying year" students (as this term is defined in the Report on the Counting of Graduate Students).
- (2) Enrolment basis is Student numbers enrolled "as at" December 1st of each year.
- (3) Enrolment reported for 1970-71 is the latest estimate available of 1970-71 actuals.  
An updated report incorporating December 1st actuals will be submitted no later than January 1st, 1971.
- (4) Discipline areas are as defined in "Survey of Citizenship of Graduate Students Enrolled in Master's and Doctoral Degree Programmes at Ontario Universities in 1969-70 ----" (C.P.U.O. Research Division, May 11, 1970).
- (5) "New registered" graduate students at those enrolled in their program for the first time for the Fall Terms.



CARLETON UNIVERSITY  
GRADUATE ENROLMENT DATA

GRADUATE DEGREES AWARDED/TO BE AWARDED BY DISCIPLINE AREA

	1965 Actual	1966 Actual	1967 Actual	1968 Actual	1969 Actual	1970 Estimated	1971 Estimated	1972 Estimated	1973 Estimated	1974 Estimated	1975 Estimated	1976 Estimated
<u>AGGREGATE FIGURES</u>												
Master's Doctoral	56 2	87 5	90 2	165 12	196 14	229 15	238 20	279 24	315 26	348 31	382 38	416 43
<u>BREAKDOWN BY DISCIPLINE AREA</u>												
<u>HUMANITIES (Language &amp; Literature)</u>												
Master's Doctoral	6 0	4 0	10 0	21 0	26 0	35 0	36 0	52 0	59 0	68 1	76 3	84 4
<u>HUMANITIES (History, etc.)</u>												
Master's Doctoral	3 0	9 0	9 0	7 0	18 0							
<u>SOCIAL SCIENCES (General)</u>												
Master's Doctoral	11 0	19 0	20 0	74 1	76 4	133 4	137 5	153 8	173 10	190 12	207 14	224 16
<u>SOCIAL SCIENCES (Regional, etc.)</u>												
Master's Doctoral	2 0	9 0	5 0	11 0	14 0							
<u>PHYSICAL SCIENCES</u>												
Master's Doctoral	9 1	11 3	8 0	14 4	12 5	34 8	33 11	37 11	41 11	45 12	49 14	53 15
<u>MATHEMATICAL SCIENCES</u>												
Master's Doctoral	0 0	2 0	4 0	4 1	6 0							
<u>ENGINEERING</u>												
Master's Doctoral	13 0	13 1	21 0	16 2	18 4	27 3	32 4	37 5	42 5	45 6	50 7	55 8
<u>LIFE SCIENCES</u>												
Master's Doctoral	2 1	2 1	2 2	9 4	5 1							





CARLETON UNIVERSITY  
GRADUATE ENROLMENT DATA  
GRADUATE DEGREES AWARDED/TO BE AWARDED BY DISCIPLINE AREA

1965 Actual	1966 Actual	1967 Actual	1968 Actual	1969 Actual	1970 Estimated	1971 Estimated	1972 Estimated	1973 Estimated	1974 Estimated	1975 Estimated	1976 Estimated
10 0	18 0	11 0	9 0	21 0							
<p>are as defined in "Survey of Citizenship of Graduate Students Enrolled in Master's Degree Programmes at Ontario Universities in 1964-70 ----" (C.P.U.O. Research Division, May 11, 1970).</p>											

Master's  
Doctoral

**Notes:** (1) Discipline areas are as defined in "Survey of Citizenship of Graduate Students Enrolled in Master's and Doctoral Degree Programmes at Ontario Universities in 1969-70 ----" (C.P.U.O. Research Division, May 11, 1970).



CARLETON UNIVERSITY  
GRADUATE ENROLMENT DATA

## PROJECTED GRADUATE ENROLMENT (FULL-TIME AND PART-TIME) BY DISCIPLINE AREA

	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
<b>AGGREGATE FIGURES</b>						
Full-time: - Master's	490	559	634	706	781	855
- Doctoral	120	143	168	194	220	246
- Total	610	702	802	900	1001	1101
Part-time: - Master's	268	292	317	344	370	392
- Doctoral	34	39	44	51	59	66
- Total	302	331	361	395	429	458
<b>BREAKDOWN BY DISCIPLINE AREA</b>						
<b>HUMANITIES (Language &amp; Literature)</b>						
Full-time: - Master's	78	90	104	117	133	148
- Doctoral	0	5	12	18	24	31
- Total	78	95	116	135	157	179
Part-time: - Master's	61	68	76	84	93	100
- Doctoral	0	0	0	0	3	5
- Total	61	68	76	84	96	105
<b>HUMANITIES (History, etc.)</b>						
Full-time: - Master's						
- Doctoral						
- Total						
Part-time: - Master's						
- Doctoral						
- Total						
<b>SOCIAL SCIENCES (General)</b>						
Full-time: - Master's						
- Doctoral						
- Total						
Part-time: - Master's						
- Doctoral						
- Total						
<b>SOCIAL SCIENCES (Regional, etc.)</b>						
Full-time: - Master's	275	311	354	394	434	474
- Doctoral	46	54	63	72	81	90
- Total	321	365	417	466	515	564
Part-time: - Master's	131	143	154	168	179	190
- Doctoral	6	8	10	13	15	17
- Total	137	151	164	181	194	207





CARLETON UNIVERSITY  
GRADUATE ENROLMENT DATA  
PROJECTED GRADUATE ENROLMENT (FULL-TIME AND PART-TIME) BY DISCIPLINE AREA

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	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
<u>PHYSICAL SCIENCES</u>						
Full-time:						
- Master's						
- Doctoral						
- Total						
Part-time:						
- Master's						
- Doctoral						
- Total						
<u>MATHEMATICAL SCIENCES</u>						
Full-time:						
- Master's	68	78	85	95	103	111
- Doctoral	50	56	62	69	76	82
- Total	118	134	147	164	179	193
Part-time:						
- Master's	21	23	24	25	27	28
- Doctoral	6	7	8	10	11	12
- Total	27	30	32	35	38	40
<u>ENGINEERING</u>						
Full-time:						
- Master's	69	80	91	100	111	122
- Doctoral	24	28	31	35	39	43
- Total	93	108	122	135	150	165
Part-time:						
- Master's	55	58	63	67	71	74
- Doctoral	22	24	26	28	30	32
- Total	77	82	89	95	101	106
<u>LIFE SCIENCES</u>						
Full-time:						
- Master's						
- Doctoral						
- Total						
Part-time:						
- Master's						
- Doctoral						
- Total						
<u>HEALTH SCIENCES</u>						
Full-time:						
- Master's						
- Doctoral						
- Total						
Part-time:						
- Master's						
- Doctoral						
- Total						



## EDUCATION

- Master's
- Doctoral
- Total

Part-time:	- Master's	
	- Doctoral	
	- Total	

## BUSINESS

Full-time:	- Master's
	- Doctoral
	- Total

Part-time:	- Master's	
	- Doctoral	
	- Total	

## OTHER

Full-time:

- Master's
- Doctoral
- Total

Part-time:	- Master's	
	- Doctoral	
	- Total	

Notes: 1. Does not include "qualifying year" students (as this term is defined in the Report on the Counting of Graduate Students).

2. Enrolment basis is Student numbers enrolled: "as at" December 1st of each year.

3. Enrolment reported for 1970-71 is the latest estimate available of 1970-71 actuals.

4. Discipline areas are as defined in "Survey of Citizenship of Graduate Students Enrolled in Master's and Doctoral Degree Programmes at Ontario Universities in 1969-70 ----" (C.P.U.A. Research Division, May 11, 1970).

5. DPA enrolment is NOT included.

6. Social Work, Public Administration and Architecture are included in the Social Science tables.





CARLETON UNIVERSITY  
GRADUATE ENROLMENT DATA

SURVEY OF ANNUAL FINANCIAL RESOURCES FOR THE SUPPORT OF FULL-TIME GRADUATE STUDENTS, 1969-70 ACTUAL

Discipline Area	Scholarships and Bursaries		Research Grants		Remuneration		P.O.S.A.P.	Not Supported under Any of Categories 1-7
	P.O.G. (1)	Other (2)	Federal Agencies (3)	Other (4)	Teaching Assistantships (5)	Other University (6)	(7)	(8)
AGGREGATE FIGURES								
Full-time:	151	141	94	25	268	50	63	55
- Master's	36	48	37	10	99	5	6	5
- Doctoral	187	189	131	35	367	55	69	60
BREAKDOWN BY DISCIPLINE AREA								
HUMANITIES (Language and Literature)								
Full-time:	50	6	0	1	30	10	6	8
- Master's	0	0	0	0	0	0	0	0
- Doctoral	50	6	0	1	30	10	6	8
HUMANITIES (History, etc.)								
Full-time:	8	2	0	0	15	3	1	2
- Master's	0	0	0	0	0	0	0	0
- Doctoral	8	2	0	0	15	3	1	2
SOCIAL SCIENCES (General)								
Full-time:	63	95	9	12	134	10	40	38
- Master's	21	7	4	7	36	0	2	3
- Doctoral	84	102	13	19	170	10	42	41
SOCIAL SCIENCES (Regional, etc.)								
Full-time:	16	1	0	6	9	11	2	4
- Master's	0	0	0	0	0	0	0	0
- Doctoral	16	1	0	6	9	11	2	4
PHYSICAL SCIENCES								
Full-time:	10	6	32	4	38	0	2	0
- Master's	7	18	13	2	33	0	3	0
- Doctoral	17	24	45	6	71	0	5	0
MATHEMATICAL SCIENCES								
Full-time:	2	9	0	0	19	0	2	0
- Master's	1	3	1	0	7	0	0	0
- Doctoral	3	12	1	0	26	0	2	0



Scholarships and Bursaries		Research Grants		Remuneration		P.O.S.A.P.	Not Supported under Any of Categories 1-7
P.O.G. (1)	Other (2)	Federal Agencies (3)	Other (4)	Teaching Assistantships (5)	Other University (6)	(7)	(8)
<b>ENGINEERING</b>							
- Master's	1	14	0	9	14	5	2
- Doctoral	1	11	0	9	2	1	1
- Total	2	25	0	18	16	6	3
<b>LIFE SCIENCES</b>							
- Master's	1	8	1	14	2	5	1
- Doctoral	6	9	1	14	3	0	1
- Total	7	17	2	28	5	5	2
<b>HEALTH SCIENCES</b>							
- Master's							
- Doctoral							
- Total							
<b>EDUCATION</b>							
- Master's							
- Doctoral							
- Total							
<b>BUSINESS</b>							
- Master's	0	4	0	6	0	4	6
- Doctoral	0	0	0	0	0	0	0
- Total	0	4	0	6	0	4	6
<b>OTHER</b>							
- Master's							
- Doctoral							
- Total							
Notes:	(1) Does not include "qualifying year" students (as this term is defined in the Report on the Counting of Graduate Students).						
	(2) Enrolment basis is the Student numbers enrolled: "as at" December 1st of each year.						
	(3) Discipline areas are as defined in "Survey of Citizenship of Graduate Students Enrolled in Master's and Doctoral Degree Programmes at Ontario Universities in 1969-70 ----" (C.P.U.O. Research Division, May 11, 1970).						
	(4) Support levels are reported on an annual basis, i.e. in relation to an entire academic year of the programme for which a student is registered.						
	(5) The number of students receiving any support has been indicated.						



# CARLETON UNIVERSITY

## GRADUATE ENROLMENT DATA

### SURVEY OF ANNUAL FINANCIAL RESOURCES FOR THE SUPPORT OF FULL-TIME GRADUATE STUDENTS 1969-70 ACTUAL

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DISCIPLINE AREA

NUMBER OF STUDENTS BY LEVEL OF SUPPORT									
NONE	\$1-500	\$501-1,000	\$1,001-2,000	\$2,001-3,000	\$3,001-4,000	\$4,001-5,000	\$5,001+	TOTAL	
55	14	33	89	156	103	27	3	480	
5	0	1	9	19	37	30	11	112	
60	14	34	98	175	140	57	14	592	
<u>BREAKDOWN BY DISCIPLINE AREA</u>									
<u>AGGREGATE FIGURES</u>									
Full-time:									
- Master's									
- Doctoral									
- Total									
8	2	1	15	27	9	7	0	69	
0	0	0	0	0	0	0	0	0	
8	2	1	15	27	9	7	0	69	
<u>HUMANITIES (Language &amp; Literature)</u>									
Full-time:									
- Master's									
- Doctoral									
- Total									
2	0	0	5	1	9	0	0	17	
0	0	0	0	0	0	0	0	0	
2	0	0	5	1	9	0	0	17	
<u>HUMANITIES (History, etc.)</u>									
Full-time:									
- Master's									
- Doctoral									
- Total									
38	11	18	42	79	43	9	2	242	
3	0	0	5	7	10	9	3	37	
41	11	18	47	86	53	18	5	279	
<u>SOCIAL SCIENCES (General)</u>									
Full-time:									
- Master's									
- Doctoral									
- Total									
4	0	1	5	9	6	1	0	26	
0	0	0	0	0	0	0	0	0	
4	0	1	5	9	6	1	0	26	
<u>SOCIAL SCIENCES (Regional, etc.)</u>									
Full-time:									
- Master's									
- Doctoral									
- Total									
0	1	1	3	10	17	6	0	38	
0	0	1	3	0	9	12	4	29	
0	1	2	6	10	26	18	4	67	
<u>PHYSICAL SCIENCES</u>									
Full-time:									
- Master's									
- Doctoral									
- Total									
0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	
<u>MATHEMATICAL SCIENCES</u>									
Full-time:									
- Master's									
- Doctoral									
- Total									
0	0	2	2	7	6	1	0	18	
0	0	0	0	1	1	1	2	5	
0	0	2	2	8	7	2	2	23	





**CARLETON UNIVERSITY**  
**GRADUATE ENROLMENT DATA**  
**SURVEY OF ANNUAL FINANCIAL RESOURCES FOR THE**  
**SUPPORT OF FULL-TIME GRADUATE STUDENTS 1969-70 ACTUAL**

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NUMBER OF STUDENTS BY LEVEL OF SUPPORT										
	NONE	\$1-500	\$501-1,000	\$1,001-2,000	\$2,001-3,000	\$3,001-4,000	\$4,001-5,000	\$5,000+	TOTAL	
<u>ENGINEERING</u>										
- Master's	2	0	9	14	17	8	0	0	50	
- Doctoral	1	0	0	1	7	11	2	1	23	
- Total	3	0	9	15	24	19	2	1	73	
<u>LIFE SCIENCES</u>										
- Master's	1	0	1	3	6	5	3	1	20	
- Doctoral	1	0	0	0	4	6	6	1	18	
- Total	2	0	1	3	10	11	9	1	38	
<u>HEALTH SCIENCES</u>										
- Master's										
- Doctoral										
- Total										
<u>EDUCATION</u>										
- Master's										
- Doctoral										
- Total										
<u>BUSINESS</u>										
- Master's	6	3	0	6	2	0	0	0	17	
- Doctoral	0	0	0	0	0	0	0	0	0	
- Total	6	3	0	6	2	0	0	0	17	
<u>OTHER</u>										
- Master's										
- Doctoral										
- Total										

- Notes:
- Does not include "qualifying year" students (as this term is defined in the Report on the Counting of Graduate Students).
  - Enrolment basis is the Student numbers enrolled: "as at" December 1st of each year.
  - Discipline areas are as defined in "Survey of Citizenship of Graduate Students Enrolled in Master's and Doctoral Degree Programmes at Ontario Universities in 1969-70 ----" (C.P.U.O. Research Division, May 11, 1970).
  - Support levels are reported on an annual basis, i.e. in relation to an entire academic year of the programme for which a student is registered.
  - Total students reported are identical with those reported on Form CUA-70-A.



## GENERAL AND HONOURS PROGRAMS IN ARTS AND SCIENCE

### DIFFERENTIATION BETWEEN GENERAL AND HONOURS PROGRAMS

When the Operating Grants formula was being established, Carleton argued strongly that there should be no differentiation in weights between "honours" and "general" students in Second and Third years. We held as a matter of educational philosophy that, whatever label they carried, students in these years should have equality of opportunity; but no more resources should be allotted to one category than the other; and consequently that there should be no difference in weights. We still hold this view.

In fact, at Carleton there has been practically no difference in treatment, and under our system there is little incentive for a student to opt for honours status in Second or Third years, since he can take just the same courses without this designation. At the same time, we believe we compare very favourably with other universities in the number of good students who want to take a Fourth year and a true honours level kind of degree.

Thus Carleton, because of its policy of equal opportunity in Second and Third years, has lost hundreds of thousands of dollars under the weighting system that has prevailed. We think it highly unfair that recently a special arrangement was made with the University of Toronto for a common weight, basing the calculation of this weight on a particular mix of honours and pass students under the old Toronto system. In effect, the University of Toronto has adopted something close to the philosophy put forward by Carleton when the formula was being established. But it is benefitting from a general weighting for Arts undergraduates that is higher than for Carleton and some other universities. Why should there not be the same common weight for all Second and Third year students in whatever university they study?

There is, of course, a good case for a higher weight for Fourth year where resources available per student must and should be higher.

### SINGLE WEIGHT FOR ARTS AND SCIENCE STUDENTS

We have no strong views on the possibility of a single weight for Arts and Science undergraduates, providing the new weight were reasonable. It is obvious that costs are higher in departments carrying on large amounts of laboratory work within the Faculty of Science or in others now receiving extra weighting. It can well be argued that these higher costs should be recognized roughly in the formula. On the other hand, it is plain that with the trend to less rigid undergraduate programs



it is becoming increasingly difficult to differentiate properly between "Arts" and "Science" students. One method would be to make a determination by the majority of the courses taken in any year by a student. A reasonable single weight would be much more simple from an administrative point of view and, in the long run, should provide a reasonable fairness among universities. In any case, there should be a higher weight for Fourth year students. Consideration should be given to lessening the difference between the total weights for Engineering and those for Science, or those for Arts and Science if the two are combined.





ITEM 2

FACTORS AFFECTING LEVELS

OF

UNIVERSITY SUPPORT



TYPES AND SIZES OF CLASSES

DATA SUMMARY FOR CPUO SURVEY

The summary of the data as submitted for the CPUO survey is given in the subsequent table:

CUA-70-H	Summary of Class Size Survey Data for 1969 as reported to the Committee of Presidents Frequency Distribution of Class Sections.
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**CARLETON UNIVERSITY**  
**SUMMARY OF CLASS SIZE SURVEY DATA FOR 1969 REPORTED TO**  
**THE COMMITTEE OF PRESIDENTS FREQUENCY DISTRIBUTION OF CLASS SECTIONS**

YEARS 1-6 Undergraduate  
 Year 7 Graduate

**UNDERGRADUATE**

SECTION SIZE	0-3			4-10			11-20			21-40			41-80			81-160			161-300			301+			TOTAL STUDENT CONTACT HOURS PER WEEK	TOTAL F.T.E. ENROLMENT FALL TERM (5)	TOTAL CONTACT HOURS/WEK PER STUDENT	
	LE	LA	TU	LE	LA	TU	LE	LA	TU	LE	LA	TU	LE	LA	TU	LE	LA	TU	LE	LA	TU							
DIS- TYPE CIPLINE AREA	4			37				40		5		44		28		19			16			6		31.60	1780			
			8		3	14				13		8			6		3		8			2						
APPLIED HUMANITIES										3			1			2			1					75.25				
						1					1							1						43.33				
							1					2						1							17.31			
PURE SOCIAL SCIENCES	1			4				25			26		27			19			23			8		79.20				
									4			2				2			2					26.19				
		2				14				22		23			8		11		10			5			19.07			
APPLIED SOCIAL SCIENCES								1		2			6			1			1			1		40.08				
															2			1										
PURE BIOLOGICAL SCIENCES				6				3		1			5			3						1		49.82				
					6				3			1			4		3					1		36.25				
						1																		4.0				
APPLIED BIOLOGICAL SCIENCES																												
PURE PHYSICAL SCIENCES	6			22				11			21			18		7			4			7		42.23				
		4			4				1			9			11		2		3			4		26.01				
						1				2					3		1					2		23.01				
APPLIED PHYSICAL SCIENCES				3				6			13			4		7			2					46.58				
					2				5			6			1		6		1					24.19				
													4			3		4						28.03				
TOTAL	11			72				86			110			89		58			47			23		364.76				
		4			15				18			20			24		18		9			5		165.77				
																												18.45

**NOTES:**

1. Data agrees with and is based upon CPUO survey requirements as set out in Memorandum dated 14th July, 1970 - re Analysis of section size information.  
 2. This form has been completed twice, once for years 1-6 undergraduate, and once for year 7-graduate.

3. Le - Lecture; LA - Laboratory; TU - Tutorials and Seminars.

4. Average Section Size = Total of Course Enrolments ÷ Total Number of Sections.

5. As per Forms UA3 Submitted December, 1969, distributed according to D.B.S. Discipline Groupings used in the Survey.

**IMPORTANT** - The class size spectrum used here anticipates prematurely the spectrum which only the basic data itself will indicate as most appropriate. For this and other reasons this summary is very much secondary to the provision of the data itself to CPUO.





CARLETON UNIVERSITY  
SUMMARY OF CLASS SIZE SURVEY DATA FOR 1969 REPORTED TO  
THE COMMITTEE OF PRESIDENTS FREQUENCY DISTRIBUTION OF CLASS SECTIONS

[illegible]

## NOTES:

1. Data agrees with and is based upon CPUO survey requirements as set out in Memorandum dated 14th July, 1970 - re Analysis of section size information.
  2. This form has been completed twice, once for years 1-6 undergraduate, and once for year 7-graduate.
  3. le - Lecture; LA - Laboratory; TU - Tutorials and Seminars.
  4. Average Section Size = Total of Course Enrolments + Total Number of Sections.
  5. As per Forms UA3 Submitted December, 1969, distributed according to D.B.S. Discipline Groupings used in the Survey.
- IMPORTANT - The class size spectrum used here anticipates prematurely the spectrum which only the basic data itself will indicate. The class size spectrum used here and other reasons this summary is very much secondary to the provision of the data itself to CPUO.



## TEACHING, LEARNING AND EFFECTS OF EDUCATIONAL TECHNOLOGY

New approaches to teaching and learning have been the subject of a good deal of thought over the past several years. Teaching and learning innovation must take into account a number of important factors, including the increasing desire of students to work rather more on their own, and the many very large classes resulting from heavy enrolments with the resulting high ratio of students to faculty members. Instructional aids are often employed in the light of these factors and their assistance is not always totally compatible with them.

The traditional use of instructional aids however, has arisen where the professor felt that the use of the devices involved would somehow enhance or improve his teaching. The newer use of teaching aids has lost sight of this, and is being introduced to a great extent to cope with large classes.

Two years ago the Commission on Undergraduate Teaching and Learning in the Faculty of Arts was set up to study the current situation with a view to examining new approaches in teaching and learning. The Commission is now completing its quite exhaustive study and its report is expected in the late fall. The Report of the Commission will represent a lot of Carleton's more recent thinking on teaching and learning.

Our use of television has most often been directed towards the problem of very large classes - usually at the first year level. The Mathematics Department has for several years employed television to teach its 100 level class, but this year it has abandoned its heavy reliance on television to go back to conventional classroom teaching. The Department withdrew from television largely because it was felt, both by students and faculty alike, that it offered inadequate student/faculty contact.

On the other hand, the first year courses in Psychology and Sociology with enrolments of approximately 1300 and 1600 respectively are using television extensively. The two courses are broken into basic groups of 35 to 40 students, in the charge of a trained teaching assistant under the general supervision of a faculty member who is accessible to students in his office. The groups divide their sessions about equally between television and discussion. The television sessions use tapes which are produced at the University. This use of television in the group context should provide some interesting results at the end of the year.

Carleton's experience to date would indicate that if television is to be used it must be used with concern for the student, and must be used well. Student resistance to large impersonal televised lectures where television is a simple substitute for the lecturer may ensure the eventual abandonment of that use. It would seem that if care is put into the television production and it is used in reasonably sized classes, and the supplemented by groups, then the costs are, if anything greater than

Amendment #1 - To Document Entitled "Presentation  
To The Committee on University Affairs, December 1970."

- (1) Page 15. The figures shown in the column for Humanities (Language and Literature) represent the aggregate figure for that category and the category entitled "Humanities (History, etc.)"
- (2) Page 15. The figures shown in the columns for Social Science (Regional etc.) represent the aggregate for that category and Social Science General.
- (3) Page 16. In the classification Mathematical Sciences, delete MATHEMATICAL and substitute ALL.

they are under the traditional system.

The School of Journalism is having inevitably to employ more television but their involvement would not fall under the general concern for new approaches to teaching and learning.

The Resource Center in the Department of Chemistry provides a good example of the new approaches that are being devised to meet the growing student trend towards working independently. The Center serves the approximately 400 students in Chemistry 100. It is equipped with a computer terminal, a projector, and a selection of publications. It is staffed two full days and three half days a week by faculty members and students are invited to use the Center to discuss problems, to use the facilities, and to become familiar with the computer. The Center replaces a voluntary 'problem session' which has been offered in previous years.

Audio visual facilities when used strictly as aids and less as substitutes become highly effective, if very costly. Television, film, and slides are used quite extensively as aids but are found to work best in relatively small groups.





RESOURCE ALLOCATION - UNIVERSITY OPERATING FUNDS

BUDGET ALLOCATIONS

The budget allocations for major salary and non-salary categories for the years 1969-70 (actual) 1970-71 (estimated) and 1971-72 (projected) is given in Table CUA-70-I, entitled "Statement of the Financing of Operations" which follows.



# CARLETON UNIVERSITY

## STATEMENT OF THE FINANCING OF OPERATIONS

All gross expenditures of the University other than on Capital Account

LESS: (a) Assisted/Sponsored Research

(b) Principal and interest payments on capital indebtedness

(c) Student Aid

(d) Ancillary enterprises (as per Form J) (Note 1)

(e) Costs of programs in education, if any (Note 1)

Total exclusions

Remainder - representing operating expenditures eligible for formula and other operating grant support (analysed on page 2)

### Sources of Financial Support for Above:

(a) Basic operating income (weighted enrolment\* x unit value)

(b) Other operating grants

(c) Balance

Total (equal to Remainder above)

1969-70 Actual	1970-71 Official Budget (7)	1971-72 Projected (6)
(\$000's)	(\$000's)	(\$000's)
26,528	31,302	
1,664	1,800	
2,713	3,091	
211	200	
2,726	3,298	
-	-	
7,314	8,389	
19,214	22,913	
14,371	17,539	
203	133	
4,640	5,241	
19,214	22,913	

e 1: It is not normal university practice to include the surplus or deficit from the operation of ancillary enterprises in the operating results for the University. In accordance with past instruction from the Department of University Affairs, with which we agree, ancillaries are budgetted and operated to produce a break-even situation. Short term surpluses or deficits are carried forward from year to year.

e 2: The above figures do not include the municipal tax levy of \$25.00 per full-time student. This assessment was \$178,000 for the 1970 calendar year.

For 1970-71, official budget figure of weighted enrolment.



# CARLETON UNIVERSITY

## STATEMENT OF THE FINANCING OF OPERATIONS

1. Enrolment of the university weighted in accordance with the Operating Grants Formula (1)
  - (i) Projected (official)
  - (ii) Used in official budget of the university
  - (iii) Latest estimate
  - (iv) Actual

1969-70		1970-71 Official Budget		1971-72 Projected	
		13,596			
		13,596			
		13,596			
11,984					
Total Amount	Per unit of weight- ed Enrol- ment	Total Amount	Per unit of weight- ed Enrol- ment (2)	Total Amount	Per unit of weight- ed Enrol- ment
(\$000's)		(\$000's)		(\$000's)	
19,214	1,603	22,913	1,685		
8,518	711	10,805	794		
633	53	759	56		
10,063	839	11,349	835		
975	81	572	42		
901	75	964	71		
930	78	1,142	84		
67	6	78	6		
800	67	1,021	75		
82	7	99	7		
1,562	130	1,842	135		
2,184	182	2,628	193		
183	15	214	16		
2,379	198	2,789	206		
10,063	839	11,349	835		

2. Total operating expenditures, as per Page 1 (5)
- Less: (i) All academic salaries (3) (full-time, part-time graduate assistantships and other classroom instructional salaries)

- (ii) Fringe Benefits related to above

Balance, All other operating expenditures

Breakdown of all other Operating expenditures:

1. All furniture and equipment
2. Library:
  - Library Acquisitions
  - Salaries and wages of library staff
  - Fringe benefits related to above
3. Plant maintenance (4)
  - Salaries and wages
  - Fringe benefits related to above
  - Other
4. Remainder:
  - Salaries and wages
  - Fringe benefits related to above
  - Other objects of expenditure

TOTAL (as above)

- NOTES:
- (1) This, of course, may be greater than the eligible number of basic income units.
  - (2) Basis of calculation: weighted enrolment used in official budget of the university.
  - (3) Includes all academic administrative appointments.
  - (4) Includes all expenses (except furniture and equipment) included under definitions 18 and 22(a) of "Instructions, Definitions and Notes Relating to the Completion of the DBS-CAUBO Report on Financial Statistics of Universities and Colleges for 1969".
  - (5) In accordance with past policy, the accounts do not include appropriations or reserves. Revenues and expenditures are recorded on the accrual basis in accordance with generally accepted accounting principles.
  - (6) Completion of this column was optional.
  - (7) That Budget which has been adopted by the Board of Governors.





## ADEQUACY OF PATTERNS

### Academic Salaries

This component is too low and will again be so next year. This is demonstrated by two facts: the Carleton student-faculty ratio is almost 17:1; and the Carleton average full time academic salaries are among the lowest of the Ontario Universities. Honoraria for part time lecturers are also lower than a number of other universities.

### Fringe Benefits

There will be pressure to increase this item as a result of a study of retirement plans in this and other universities.

### Furniture and Equipment

Equipment buying is too low to keep our laboratories maintained and developing as they should. The situation has been exacerbated by the dropping off of N.R.C. Major Equipment Grants.

### Library

Our total acquisitions for this year and last year appear fairly satisfactory. Carleton is having to put a relatively high proportion of resources into the purchase of Library materials to make up for inadequate development of the collection during the sixties when Carleton was "emerging" without the help of "emergent" grants. The Library is still deficient in support for much of the work being done at the University.

### Remainder

Recent changes in regulations about capital funds have sharply increased the need for the use of current funds for necessary alterations and renovations. This demand is heavy in a rapidly-growing university where there is a constant need to re-adapt the use of space.

### General

Carleton's income is squeezed by the present weighting system in the operating formula. It receives a low amount per f.t.e. student.

## ANCILLARY OPERATIONS - SOURCES OF REVENUE AND EXPENDITURES

An outline of sources of revenue and expenditures for ancillary operations for the years 1969-70 (actual), 1970-71 (estimated) and 1971-72 (projected) is given in Table CUA-70-J, entitled "Ancillary Operations 1969-70 (actual)" which follows.



# CARLETON UNIVERSITY ANCILLARY OPERATIONS (I) 1969-70 ACTUAL

NAME OF ANCILLARY ENTERPRISE	Athletics	Bookstore	Student Health	Residence Commons	Parking	1969-70 Actual	1970-71 Budget	1971-72 Projected
SOURCES OF DIRECT REVENUE								
1. Fee or membership revenue.	199		72	1,144		1,415	1,666	
2. Direct charges for goods or services.	28	951		143	152	1,274	1,511	
3. Other				43		43	88	
TOTAL DIRECT REVENUE	227	951	72	1,330	152	2,732	3,265	
DIRECT COSTS								
1. Costs directly attributable to the enterprise.	220	918	63	1,277	144	2,622	3,169	
2. Costs shared with other ancillary enterprise(s).								
TOTAL DIRECT COSTS	220	918	63	1,277	144	2,622	3,169	
EXCESS (shortfall) of Direct Revenue over Direct Costs	7	33	9	53	8	110	96	
INDIRECT (Overhead or Joint) Costs - as ordinarily budgeted but excluding transfers as dealt with below:	-	19	-	76	9	104	129	
EXCESS (shortfall)	7	14	9	( 23)	( 1)	6	( 33)	
NET EFFECT OF TRANSFERS "(To)" and "From" "Appropriations" and "Reserves".								
REPORTED OR BUDGETED EXCESS OR (SHORTFALL) ON ANCILLARY ENTERPRISE.	7	14	9	( 23)	( 1)	6	( 33)	

- (1) Those enterprises that are not directly related to the educational functions of the university, but are undertaken or operated to provide service to faculty and students.
- (2) The Net income or deficit from the operations of ancillary enterprises is not included in the operating results of the University. The accumulated income or deficit is carried forward each year as a deferred item on the balance sheet. In the long-run, each ancillary is expected to break even.



## ACADEMIC MARKETPLACE

### FINDING QUALIFIED FACULTY MEMBERS

We found in general this year that there was a good supply of junior candidates in Humanities subjects. Able, experienced people in some particular fields, however, were still hard to find. For example, we felt a great scarcity of good potential faculty members to work in Canadian Literature, both English and French. Well-trained Canadians are still difficult to find for some fields in the Social Sciences, particularly Sociology, Economics, and Geography. In Science subjects, there were generally a good number of junior candidates available, although there was some difficulty in filling particular positions calling for background in certain areas and experience. In Geology, there was a problem of finding people with the right formation. Over all, the availability of qualified candidates at junior levels in Engineering was good, but still with a shortage in some specific fields. Experienced faculty members are still extremely difficult to locate. In summary, we found the supply of prospective members decidedly improved at the first appointment stage, although good candidates were lacking in a number of particular areas. On the other hand, there is still a general shortage of prospects for intermediate or senior positions. With its rapid growth, Carleton cannot develop only with fledgling faculty members, and must seek the requisite balance for the healthy evolution of departments.

### SOURCES OF NEW FACULTY APPOINTED

The aggregate totals for new faculty appointed during the period September 15, 1969 to September 15, 1970 are shown in Table CUA-70-K, which is entitled "Full Time Faculty Appointments During Period September 15, 1969 to September 15, 1970".





# CARLETON UNIVERSITY

## FULL-TIME FACULTY APPOINTMENTS DURING PERIOD SEPTEMBER 15th, 1969 TO SEPTEMBER 15th, 1970

TOTAL	DISCIPLINE AREA	CANADA	UNITED STATES	UNITED KINGDOM	OTHER COMMONWEALTH	FRANCE	OTHER
	<u>AGGREGATE FIGURES</u>						
	- Country of Residence in Year Previous to Appointment	56	20	8	1	2	5
	- Citizenship Status at date of Appointment	46	14	13	3	2	14
	- Citizenship Status at birth						
	- Country of 1st Degree	42	17	16	1	2	13
	- Country of last Degree	29	33	19		4	6
	<u>BREAKDOWN BY DISCIPLINE AREA</u>						
	<u>FACULTY ADMINISTRATION</u>						
	- Country of Residence in Year Previous to Appointment						
	- Citizenship Status at date of Appointment						
	- Citizenship Status at birth						
	- Country of 1st Degree						
	- Country of last Degree						
	<u>HUMANITIES</u>						
	<u>Pure</u>						
	- Country of Residence in Year Previous to Appointment						
	- Citizenship Status at date of Appointment						
	- Citizenship Status at birth						
	- Country of 1st Degree						
	- Country of Last Degree						
	<u>Applied</u>						
	- Country of Residence in Year Previous to Appointment						
	- Citizenship Status at date of Appointment						
	- Citizenship Status at birth						
	- Country of 1st Degree						
	- Country of last Degree						
	<u>SOCIAL SCIENCE</u>						
	<u>Pure</u>						
	- Country of Residence in Year Previous to Appointment						
	- Citizenship Status at date of Appointment						
	- Citizenship Status at birth						
	- Country of 1st Degree						
	- Country of last Degree						
	<u>Applied</u>						
	- Country of Residence in Year Previous to Appointment						
	- Citizenship Status at date of Appointment						
	- Citizenship Status at birth						
	- Country of 1st Degree						
	- Country of last Degree						



# CARLETON UNIVERSITY FULL-TIME FACULTY APPOINTMENTS DURING PERIOD SEPTEMBER 15th, 1969 TO SEPTEMBER 15th, 1970

TOTAL	DISCIPLINE AREA	CANADA	UNITED STATES	UNITED KINGDOM	OTHER COMMONWEALTH	FRANCE	OTHER
	<p><u>BIOLOGICAL SCIENCE</u></p> <p><u>Pure</u> - Country of Residence in Year Previous to Appointment</p> <p>- Citizenship Status at date of Appointment</p> <p>- Citizenship Status at birth</p> <p>- Country of 1st Degree</p> <p>- Country of last Degree</p> <p><u>Applied</u> - Country of Residence in Year Previous to Appointment</p> <p>- Citizenship Status at date of Appointment</p> <p>- Citizenship Status at birth</p> <p>- Country of 1st Degree</p> <p>- Country of last Degree</p> <p><u>PHYSICAL SCIENCE</u></p> <p><u>Pure</u> - Country of Residence in Year Previous to Appointment</p> <p>- Citizenship Status at date of Appointment</p> <p>- Citizenship Status at birth</p> <p>- Country of 1st Degree</p> <p>- Country of last Degree</p> <p><u>Applied</u> - Country of Residence in Year Previous to Appointment</p> <p>- Citizenship Status at date of Appointment</p> <p>- Citizenship Status at birth</p> <p>- Country of 1st Degree</p> <p>- Country of last Degree</p> <p>Note: This return was requested in order to update the Citizenship Analysis of University Faculty carried out by the C.P.U.O. in early 1970. Please note that discipline areas (and programs included within such areas) remain those of the Dominion Bureau of Statistics.</p>						



## OPERATING AND CAPITAL SUPPORT

### POLICY OF MAINTAINING DIFFERENTIATION

Any comment on the policy of maintaining differentiation between operating and capital assistance must be based upon a viewpoint as to how the funds available for assistance to the universities may best be distributed among the universities, and expended by each in such a way as to maximize the benefits to be derived from these funds.

It would appear from past experience, and in theory, that any specific grants whatsoever are undesirable in that they tend to foster a particular kind of expenditure, whether or not that type of expenditure is higher in priority than another kind which does not fall within the restriction.

For example, specific computer grants ensured that a specific amount of the money available in the province for total university support was earmarked for computers. This meant that the total sum available for other uses was reduced. In the individual Institutions it meant that the funds could be secured only if spent on computers, which in turn almost ensured that such an amount would indeed be spent on computers. It also could have established a level of expenditure which might be difficult to reduce later. Folding the computer support grants into the regular unit support gave the Institutions the same total resources, but left to the particular university the tough decisions about how these resources were allocated. Each institutional allocation to computer support under the latter system was made not because there were so many dollars specifically available from the Province for this purpose, but rather in competition with the need for these dollars for salaries, equipment, etc. It would seem indisputable that the present method without this specific support is the more desirable.

It follows that the split of total support available to each Institution into Operating Funds and Capital Funds produces the same effect. How is the real need for a new facility to be measured against a need for additional faculty or equipment when the financing of these things are carried out under two entirely separate sets of regulations? To the extent that it is possible that given the choice, an Institution might prefer to postpone a capital project in favour of some operating need, but is precluded from doing so because of the system of financing, the system probably prevents optimum use of the funds available.





Since needs vary from Institution to Institution and change over time, it seems that the best way to ensure optimum use of the available money is to allow maximum freedom to each Institution in expending whatever support is available to it. It follows that one grant would be better than two.

From an accounting viewpoint, it would seem that there is little to justify the continuance of the long standing practice of differentiating operating and capital assistance. The line between an expenditure for operating purposes and one for capital purposes is very vague except for major expenditure. No definition of a "Capital Expenditure" could be applied in a general way to current practice except possibly that if the expenditure is charged against capital funds, it is a capital expenditure. Similarly an expenditure charged against operating funds is an operating expenditure, even though it may be incurred to acquire an asset of relatively long life and of major value. Unlike commercial practice in industry where the line is clearer, consistency from Institution to Institution is lacking. When one couples these things with the fact that a large percentage of the income in both of these funds comes from the same source, government grants, one is led to conclude that little purpose is now served by the accounting differentiation of these funds.

There are some major problems which would have to be considered carefully before the present method could be changed. These are impressive enough that this could be a matter of balancing the benefits of the change against the practical difficulties which would flow from such a change.

Some of the more obvious difficulties are:

- 1) There is a problem which stems from the fact that capital funds are financed by the issue of debentures.
- 2) Some equitable method of replacing the operating and capital formulae would have to be devised.
- 3) There may be some problems for the province in the fact that capital expenditures fluctuate in such a way that annual surpluses or deficits could occur in a single fund more easily than is now the case with operating funds. In addition it would seem that some of the detailed control of capital expenditures now in effect would be more difficult to maintain with one fund. Since the whole concept is based upon freedom to expend funds without restriction this would have to be accepted by D.U.A.



These are a few of the practical difficulties. While they are of major proportions, further examination of the concept would seem to be desirable.

Should the one grant method be considered for the individual Institutions, it may be necessary for the system as a whole to be financed on a different basis. For example, it may be necessary for government to continue to finance the acquisition of relatively long lived assets through the issue of debentures. It should be possible to devise a reporting system which would make this possible. It would seem that there is no theoretical reason why the financing of the individual university must of necessity be the same as that for the system as a whole.



ITEM 3

FUTURE PLANNING





## FIVE YEAR FORECAST

### CHANGES IN PROPOSED DEVELOPMENTS

There are no very significant changes in developments over those proposed in the 1968 and 1969 submissions to the Committee on University Affairs. The projected full time enrolment for the university for 1975-76 differs little from that projected last year. The same applies to part time enrolment. The projected summer session enrolment for 1975-76 is up some six hundred over last years figure, in part due to a slight increase expected in the under-graduate component but mainly due to increased registration of graduate students. The rate of growth in enrolment at Carleton during the past two years has produced strains in individual departments and faculties and there might well be a need to limit enrolment in the future in a selective way. It is quite possible also that the total demand for places at Carleton may exceed the projected figures. Should this be so the projected figures would then become target figures which represent in our view a tolerable rate of growth and a fair share for Carleton of the increased enrolment within the province.

The planned additions to the physical plant follow a different order from last year as a result of a reassessment of the anticipated growth of the various components of the university but the order must still be regarded as subject to change since it will be re-examined again when complete data become available on this year's enrolment, student courses and student contact hours per week. The forecast rate of planning and construction is slower than that presented last year and is cause for concern. The slowdown arises partly because of changes in internal procedures involving more opportunity for participation in decision making by students and faculty and in part because of difficulties in sustaining enthusiasm and maintaining planning schedules in the face of uncertainties as to our ability to finance the various projects.

One change in the undergraduate programs might bear mentioning. While combined honours in many combinations of departments has always been possible, the arrangements in Science have been formalized with respect to combined honours in Biology and Chemistry, Biology and Geology and Geology and Physics.

Some changes have been decided upon or are being contemplated at the graduate level. The proposed date of introduction of graduate courses in the School of Architecture has been set back to 1973-74 one year later than proposed last year.



The Psychology Department intends to give serious consideration this year to the desirability of developing an applied program over the next few years. Factors which encourage this action include: the demand for applied psychologists which exceeds the supply, the decelerating rate in the need for academicians, and the increasing concerns with relevancy and social action by both students and faculty.

The planning for the development of new programs previously reported by the School of Social Work has been suspended because of uncertainties around available space.

Engineering expects that work in the computer area at the graduate level will expand and become increasingly of interest to students who do not have engineering backgrounds. This may lead to the need for some designation other than Master of Engineering for students completing a program of studies in this area.

In the Faculty of Science, the Department of Physics intends to examine the possibility of offering a broad program of studies leading to the Master's degree in contrast to the present rather specialized programs. This examination has been stimulated by discussions related to the introduction of a general science degree at the undergraduate level and inquiries from school teachers and others seeking to update their knowledge.

#### UNDERGRADUATE ENROLMENT FORECAST

The undergraduate enrolment forecast for each year is given in Table CUA-70-L, entitled "Long Term Enrolment Data to 1975-76".

#### WEIGHTED ENROLMENT FORECASTS

The weighted enrolment forecasts for each year are given in Table CUA-70-N, entitled "Weighted Enrolment for Purposes of the Interim Capital Formula".



**CARLETON UNIVERSITY**  
**LONG-TERM ENROLMENT DATA**  
**TO 1975-76**

1970-71 (Estimate)		1971-72	1972-73	1973-74	1974-75	1975-76
2485	(i) Full-Time "Freshman Intake" (i.e. 1st Year Undergraduate Degree)	2805	3080	3300	3490	3600
7498	(ii) Total Full-Time Undergraduate (including diploma and other non-degree and make-up or qualifying year)	8380	9200	9950	10570	11210
649	(iii) Total Graduate (Fall-Term)	732	832	930	1031	1131
8147	(iv) Total Full-Time Enrolment (ii plus iii)	9112	10032	10880	11601	12341
2191.5	(v) F.T.E. of Part-Time Enrolment using Formula Conversion Factors (including "Summer School" Graduate Students)	2471.9	2710.0	2925.1	3111.4	3285.5
10338.5	(vi) F.T.E. Enrolment (iv plus v)	11583.9	12742.0	13805.1	14712.4	15626.5
13681.6	(vii) Total Basic Income Units Under Formula (i.e. Total Weighted Enrolment)	15360.4	16958.0	18481.2	19822.4	21177.0





# CARLETON UNIVERSITY

## WEIGHTED ENROLMENT FOR PURPOSES OF THE INTERIM CAPITAL FORMULA

### SUMMARY

Weighting Categories: Capital Weighting Scheme						
	A 1.0	B 1.5	C 2.0	D 3.0	E 4.0	TOTAL WEIGHTED ENROLMENT
1970-71	6297 @ 1.0 = 6297.0	1580 @ 1.5 = 2370.0	33 @ 2.0 = 66.0	150 @ 3.0 = 450.0	87 @ 4.0 = 348.0	9531.0
1971-72	7038 @ 1.0 = 7038.0	1758 @ 1.5 = 2637.0	43 @ 2.0 = 86.0	173 @ 3.0 = 519.0	100 @ 4.0 = 400.0	10680.0
1972-73	7730 @ 1.0 = 7730.0	1940 @ 1.5 = 2910.0	56 @ 2.0 = 112.0	194 @ 3.0 = 582.0	112 @ 4.0 = 448.0	11782.0
1973-74	8336 @ 1.0 = 8336.0	2130 @ 1.5 = 3195.0	69 @ 2.0 = 138.0	220 @ 3.0 = 660.0	125 @ 4.0 = 500.0	12829.0
1974-75	8842 @ 1.0 = 8842	2292 @ 1.5 = 3438.0	80 @ 2.0 = 160.0	247 @ 3.0 = 741.0	140 @ 4.0 = 560.0	13741.0
1975-76	9356 @ 1.0 = 9356	2465 @ 1.5 = 3697.5	94 @ 2.0 = 188.0	274 @ 3.0 = 822.0	152 @ 4.0 = 608.0	14671.5



CAPITAL REQUIREMENTS

CASH FLOWS

The capital requirements are detailed on subsequent tables as follows:

- CUA-70-M-1 Probable Cumulative 5 Year Cash Flow for Formula Capital Projects with Final Approvals.
- CUA-70-M-2 Probable Yearly 5 Year Cash Flow for Formula Capital Projects with Final Approvals prior to March 31, 1969
- CUA-70-M-3 Probable Yearly 5 Year Cash Flow for Non-Formula Capital Projects with Final Approvals.
- CUA-70-M-4 Proposed Cumulative 5 Year Cash Flow for Additional Projects for Interim Capital Formula Entitlement.
- CUA-70-M-5 Probable Yearly 5 Year Cash Flow for Additional Non-Formula Capital Projects.



**CARLETON UNIVERSITY**  
**PROBABLE CUMULATIVE 5 YEAR CASH FLOW FOR FORMULA CAPITAL PROJECTS WITH FINAL APPROVALS**  
**(SUBSEQUENT TO APRIL 1-1969 AND BY MARCH 31-1971)**

Project No.	Project Name	In \$ 000's		Cash Flow of Financial Assistance in \$ 000's							REMARKS
		Approved Total Expenditure	Total Financial Assistance	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75		
C.A. 49	Arts I	6,696	6,696	584	4,800	6,696	6,696	6,696	6,696	U.A.C.P. 3 has been submitted. U.A.C.P. 5 is in preparation so the cash flow for the School of Architecture is shown on this table on the assumption that tenders will be called and Final Approval received before March 31, 1971.	
C.A. 58	School of Architecture	2,485	2,485	27	154	1,740	2,485	2,485	2,485		
	Total	9,181	9,181	611	4,954	8,436	9,181	9,181	9,181	Shown on Table M-4	



**CARLETON UNIVERSITY**  
**PROBABLE YEARLY 5 YEAR CASH FLOW FOR "FORMULA" CAPITAL PROJECTS WITH FINAL APPROVALS**  
**PRIOR TO MARCH 31-1969**

PROJECT NO.	PROJECT NAME (only those projects requiring additional funds)	In \$ 000's			Balance of Financial Assistance in \$ 000's					REMARKS
		Approved Total Expenditure	Total Financial Assistance	Probable Financial Assistance to March 31/71	1971-72	1972-73	1973-74	1974-75	Subsequent	
C.A. 17	Food Service Centre	3,097,276	2,942,500	2,842,500	100,000					
C.A. 29	C.J. Mackenzie Ph. III	1,473,095	1,399,500	1,399,500						
C.A. 31	University Centre	4,408,767	4,016,800	4,016,800						





**CARLETON UNIVERSITY**  
**PROBABLE YEARLY 5 YEAR CASH FLOW FOR "NON-FORMULA" CAPITAL PROJECTS WITH FINAL APPROVALS**  
**(AS OF MARCH 31-1971)**

		In \$ 000's				Balance of Financial Assistance In \$ 000's				Subsequent	REMARKS (list formula project which correlates)
PROJECT NO.	PROJECT NAME (only those projects requiring additional funds)	Approved Total Expenditure	Total Financial Assistance	Probable Financial Assistance to March 31/71	1971-72	1972-73	1973-74	1974-75			
CA.37	Building Alterations '66	250,651	238,200	238,200						)	
CA.41	Television Project '67	290,921	276,400	276,400						)	
CA.42	Tory Building Altns. '68	177,332	168,500	168,500						)	Final Approval received before October 1970
CA.44	Building Alterations '67	182,921	173,800	173,800						)	
CA.46	Steacie Alterations '68	66,019	62,800	62,800						)	
CA.50	Paterson Hall Altns. '68	155,597	147,817	147,817						)	
CA.53	Roads 1969	408,028	408,100	303,323	104,777					)	
CA.54	Mackenzie Altns. 1969	122,217	116,106	116,106						)	
	Projects which will have been tendered by March 31, 1971 on which Final Approval is expected before March 31, 1971										
CA.52	Architecture Furniture	87,261	87,261	73,765	13,496						Partial UACP.8 received
CA.55	Quadrangle Renovations	79,000	75,050	44,412	30,638						UACP.7, Phase II underway
CA.56	Emergency Power & Alarm Equipment	227,786	216,397	168,127	48,270						Final UACP.7 is in preparation
CA.57	Sewers and Water 1969	724,084	687,880	687,880							Final UACP.7 in Nov. '70
	St. Pat's Altns. 1969	68,000	68,000	68,000							UACP.1 and 7 submitted
	Library Levels 1 and 2	281,000	281,000	265,000	16,000						UACP.1 and 7 submitted



**CARLETON UNIVERSITY**  
**PROPOSED CUMULATIVE 5 YEAR CASH FLOW FOR ADDITIONAL PROJECTS**  
**FOR INTERIM CAPITAL FORMULA ENTITLEMENT**

(All Amounts in \$ 000's)

REMARKS													*Estimated
The latest entitlement values have been shown to provide a valid comparison with the latest construction program.													
Interim Formula Cumulative Cash Flow Entitlement as Per <del>1969/1970</del> 1970 October													
Total of Probable Cumulative Cash Flow for Formula Projects with Approvals As of March 31 - 1971													
Project No.	Project Name	Approval Status	Date of Last Approval	Estimated Total Expenditure	(Table M-1) Total Financial Assistance	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76*	Balance	
	Arts I, Phase 2	-	-	2,789	2,789	5,956	12,125	18,310	23,741	29,183	34,441		
*****		*****	*****	*****	*****		8,436	9,181	9,181	9,181	9,181		
	Maintenance	-	-	996	996		3,689	9,129	14,560	20,002	25,260		
*****		*****	*****	*****	*****								
	MacOdium Addition	-	-	2,368	2,368		1,602	5,344	10,775	16,217	21,475		
*****		*****	*****	*****	*****								
	Athletic Addition	-	-	2,572	2,572		129	1,490	2,572	2,572	2,572		
*****		*****	*****	*****	*****		102	1,486	5,835	11,277	16,535		
	Classroom Building	-	-	3,109	3,109		155	1,800	3,109	3,109	3,109		
*****		*****	*****	*****	*****		(53)	(314)	2,726	8,168	13,426		
	Bookstore	-	-	905	905			308	905	905	905		
*****		*****	*****	*****	*****			(622)	1,821	7,263	12,521		
	Administration	-	-	2,166	2,166			108	1,254	2,166	2,166		
*****		*****	*****	*****	*****			(730)	567	5,097	10,355		
	Science	-	-	3,921	3,921			13	395	2,583	3,921		
*****		*****	*****	*****	*****			(743)	172	2,514	6,434		
Cumulative Cash Flow carried to Page 2						3,742	9,872	14,388	17,488	18,826			



**CARLETON UNIVERSITY**  
**PROPOSED CUMULATIVE 5 YEAR CASH FLOW FOR ADDITIONAL PROJECTS**  
**FOR INTERIM CAPITAL FORMULA ENTITLEMENT**

(All Amounts in \$ 000's)

(All Amounts in \$ 000's)													
REMARKS	The latest entitlement values have been shown to provide a valid comparison with the latest construction program						Probable Cumulative Cash Flow of Financial Assistance						*Estimated
	1971-72	1971-72	1972-73	1973-74	1974-75	1975-76*							
Interim Formula Cumulative Cash Flow Entitlement as Per <del>XXXXXX</del> 1970 October													
Total of Probable Cumulative Cash Flow for Formula Projects with Approvals As of March 31 - 1971													
Project No.	Project Name	Approval Status	Date of Last Approval	Estimated Total Expenditure	Total Financial Assistance	1971-72	1972-73	1973-74	1974-75	1975-76*	Balance		
*****	Cumulative Cash Flow brought forward from Page 1	*****	*****	*****	(Table M-1)	8,436	9,181	9,181	9,181	9,181	Balance		
*****	Science - Engineering Library	-	-	1,522	3,689	12,125	18,310	23,741	29,183	34,441	Balance		
*****	*****	*****	*****	*****	3,742	17,488	18,826	6,434	1,522	4,912	Balance		
*****	Social Science	-	-	3,109	154	1,522	1,522	1,003	992	3,109	Balance		
*****	*****	*****	*****	*****	154	1,003	1,522	808	1,271	1,803	Balance		
*****	School of Social Work	-	-	1,271	433	1,271	1,271	433	1,271	1,271	Balance		
*****	*****	*****	*****	*****	1,271	1,271	1,271	1,419	2,079	532	Balance		
*****	Engineering	-	-	2,344	2,344	2,344	2,344	40	1,113	1,113	Balance		
*****	*****	*****	*****	*****	2,700	2,700	2,700	2,119	272	1,779	Balance		
*****	Mathematics	-	-	2,700	2,700	2,700	2,700	2,391	2,391	2,360	Balance		
*****	*****	*****	*****	*****	1,959	1,959	1,959	32	930	930	Balance		
*****	Architecture	-	-	1,959	1,959	1,959	1,959	2,423	2,423	3,290	Balance		
*****	*****	*****	*****	*****	1,790	1,790	1,790	90	90	90	Balance		
*****	St. Pat's Addition	-	-	1,790	1,790	1,790	1,790	3,380	3,380	3,380	Balance		
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	Balance		





**CARLETON UNIVERSITY**  
**PROBABLE YEARLY 5 YEAR CASH FLOW FOR ADDITIONAL "NON-FORMULA" CAPITAL PROJECTS**

Project No.	Project Name	Approved Status	Approved Total Expenditure	In \$ 000's		Balance of Financial Assistance in \$ 000's					REMARKS (list formula project which correlates)	
				Total Financial Assistance	Probable Financial Assistance to March 31/71	1971-72	1972-73	1973-74	1974-75	Subsequent		
	St. Pat's Renovations 1970			54,000	54,000							
	Transformer Conversion			100,000	10,000	55,000	35,000					
	C.E.F. Laboratories			55,000	5,000	50,000						
	Tory Building			325,000	15,000	310,000						
	Steacie Building Labs.			81,000	4,000	77,000						
	Physics Labs. & Workshop			52,000	10,000	42,000						
	Landscaping 70 - 71			95,000	75,000	20,000						
	Chilling Connection			51,000		51,000						School of Architecture
	Physics Equipment			56,000		20,000	20,000	16,000				Arts I
	Paterson Hall - Arts			270,000		270,000						Arts I
	Physics/Math. Space			56,000		30,000	26,000					
	Arts II - Computer Area			41,000		30,000	11,000					
	Administration			40,000		30,000	10,000					
	Tunnels & Services 71/72			403,000		350,000	53,000					Arts I - Phase 2
	Landscaping 71/72			160,000		160,000						Arts I
	St. Pat's Renovations			1,300,000		170,000	600,000	530,000				



**CARLETON UNIVERSITY**  
**PROBABLE YEARLY 5 YEAR CASH FLOW FOR ADDITIONAL "NON-FORMULA" CAPITAL PROJECTS**

Project No.	Project Name	Approved Status	Approved Total Expenditure	Balance of Financial Assistance in \$ 000's						REMARKS (list formula project which correlates)
				Total Financial Assistance	Probable Financial Assistance to March 31/71	1971-72	1972-73	1973-74	1974-75	
	Roads 1972-73			505,000		150,000	300,000	55,000		Sch. of Arch.
	Engineering-Arch. Space			147,000			70,000	77,000		Sch. of Arch.
	Landscaping 72/73			55,000			55,000			
	Tunnels & Services 72/73			250,000			250,000			
	Chemistry-Lab. Space			54,000			34,000	20,000		
	Southam Hall Bookstore			30,000				30,000		Bookstore Bldg
	Engineering Lab. Space			84,000				84,000		
	Food Service Centre			32,000				32,000		Athletic Addn.
	Tunnels & Services 73-74			336,000				336,000		Athletic Addn.
	Landscaping 73-74			160,000				160,000		
	Administration Alter.			32,000				32,000		
	St. Pat's Renovations			782,000				82,000	700,000	
	Loeb Alterations			43,000			30,000	13,000		Arts I, Phase 2
	Southam Hall Renovations			52,000				52,000		
	Administration Alter's.			32,000			20,000	12,000		Maintenance
	Library Alterations			126,000			100,000	26,000		MacOdrum Addn.



**CARLETON UNIVERSITY**  
**PROBABLE YEARLY 5 YEAR CASH FLOW FOR ADDITIONAL "NON-FORMULA" CAPITAL PROJECTS**

Balance of Financial Assistance in \$ 000's										
Project No.	Project Name	Approved Status	Approved Total Expenditure	In \$ 000's			Subsequent	REMARKS (list formula project which correlates)		
				Total Financial Assistance	Probable Financial Assistance to March 31/71	1971-72				
	Athletic Alterations			52,000				Athletic Addn.		
	Services & Furniture '73			642,000				Residences '73		
	Tunnels & Services-74-75			245,000			245,000			
	Roads 74-75			437,000			437,000			
	Landscaping 74-75			110,000			110,000			
	Chemistry			84,000			84,000			
	Engineering			74,000			74,000			
	Physics			42,000			42,000			
	Services & Furniture '75			199,000			199,000	Residences '75		



PROPOSED NEW PROGRAMS

FOR 1971-72

An M.A. program in Journalism is being considered and it is possible that work at the qualifying year level will be introduced in 1971-72. An honours program in Music is being proposed as indicated in the UA4 Form being submitted separately.

FOR 1972-73

Consideration is being given to the development of an M.A. program in Anthropology with particular specialization in Social Anthropology. This will constitute a natural outgrowth of the very high enrolment in courses in that discipline over the past two years.

The second year of the M.A. program in the School of Journalism may be introduced in 1972-73. The program will include both advanced professional work in various media such as television and work in such specialized areas as science writing or financial writing. It will also cover research in the various areas of communication of special media studies, including such topics as history of the media.

The first year of the projected Ph.D. program in History is anticipated for 1972-73. The Department plans to offer three seminars in Canadian History and up to three in other fields.

The first year of a Ph.D. in French is also being considered for 1972-73. The French Department, while aware that four Ph.D. programs in French studies already exist in the Province, feels that adherence to the principle of cooperation will avoid unnecessary duplication in programs that are essentially complementary.





REORGANIZATION OF PROGRAMS AND/OR COURSES

IN 1971-72 AND 1972-73

Rapidly rising enrolment has kept pressure on the University to maintain if not increase opportunities with respect to courses. Generally the need to drop courses and/or programs has not been felt other than the ever present need to keep the curriculum healthy. Thus a number of individual courses have been dropped or replaced but there has been no significant cutting back in course offerings.

Both Commerce and Journalism have, however, dropped three year Pass Programs which they have replaced with Honours Programs.

The report of the Commission on Undergraduate Teaching and Learning in the Faculty of Arts may make recommendations which will result in some substantial reorganization. Specifically the Commission may recommend changes in prescriptions for the Bachelor of Arts



## FUTURE PLANNING EFFECTS

### CAPITAL FORMULA STANDARDS

#### Introduction

It is now some eighteen months since the Interim Capital Formula came into effect. This represents about one-half the normal time between commencement of planning for a building and occupancy of that building and is thus almost too short a period for experience with the formula to be meaningful. Nevertheless, there are indications as to the adequacies and inadequacies of the formula which seem worthy of comment.

In retrospect, the decision to introduce an interim formula in 1969 rather than wait for the collection and analysis of data on the physical facilities and their utilization at the provincially-assisted universities of Ontario has been justified. Recognizing that the longer the present formula remains in effect, the more difficult it will be to introduce a new permanent formula without seriously disturbing the planning at some universities, it still seems to have been a wise move. The collection and analysis of the data on Physical Plant and its utilization has proved to be more lengthy and troublesome than first anticipated, yet this data is vital to the development of a permanent formula. In the interim, the present formula has met three important requirements of any capital formula:

- 1) It has provided an objective device for defining the need. This has no doubt been of great assistance to CUA and DUA in dealing with Treasury Board.
- 2) It has provided an objective device for the distribution of available funds among the universities.
- 3) It is of a form which is capable of adjustment or modification in the light of feedback as evidenced by the revisions introduced in the current year.

The introduction of the interim formula gave to the universities for the first time a guide which they could use for physical planning for five years into the future, with at least some indication of what could be expected by way of government support.

Hopefully, a more permanent formula can be developed based upon careful studies of the requirements of the various components of our universities, which will be much better than the present formula but, in the interim, the latter is proving to be a useful instrument. It seems likely that the interim formula will be needed for at least one more year and it is with this in mind as well as the development



of a new formula that the following points are put forward:

1) Space Standard

The standard adopted initially of 130 square feet per full time student would, if adhered to, result in a fluctuating figure for the space unit (space per weight one). This seems to have been recognized and the standard now is usually quoted as 96 net assignable square feet per weighted unit of enrolment. CPUO has stated its view that the 96 square feet figure is not adequate and has nothing new to add at this time. When the use of existing facilities is analyzed as part of the Taylor-Lieberfeld and Heldman study and compared with that of other jurisdictions it should be possible to demonstrate more conclusively the adequacy or inadequacy of the present space unit. It will be necessary, however, to supplement the Taylor-Lieberfeld and Heldman study by a series of user-requirement studies in order to establish finally the nature and amounts of space needed by different groups within universities and thus arrive at a realistic space unit. Such studies would also be helpful in determining the proper weights for various categories of students or courses. These user-requirements studies may reveal that the space unit needs to be different for universities in different size ranges or at different stages of development. Not only emerging universities but also mature universities heavily engaged in complex research programs may require space on a scale greater than the average provision under the formula.

2) Cost Unit

It seems to have been agreed that \$55 per net assignable square foot is not adequate to build and equip buildings of the same standards as the Ontario universities have built heretofore. Statements by the chairman of CUA and officials of DUA have made it clear that the decision not to raise the cost allowance to allow for rising prices is the result of a policy to bring about some reduction in the design quality of university facilities. Such a policy is presumably based upon judgments concerning the cost of university facilities relative to other facilities serving similar functions, capital costs versus maintenance and upkeep costs, useful life of buildings and the like. It would be helpful to have data relevant to these matters to study and analysis in order to assess the reasonableness of this policy. The fact that a particular university has in the past or succeeds in the future in building within the \$55 allowance does not of itself prove that this figure is realistic or sensible. While no escalation has been allowed for in the interim formula to date, it is almost a certainty that building costs will rise and it is extremely difficult to plan some three to five years into the future without knowing how long the \$55 figure is to remain in effect.





### 3) Weighting - General

The Interim Formula requires the identification of the program in which students are enrolled (Arts, Science, Pass, Honours, etc.) and the level to which they have progressed (first year, second year and beyond, Masters, etc.) in order to assign weights. Since programs with the same title differ significantly from one university to another, this raises concerns over the equity of the weighting for particular universities. The University of Toronto, for example, made a study of the space generated by the formula for its faculties and compared the resulting distribution with what was actually assigned. The study concluded that the weights of the Interim Formula were inadequate to meet the situation then existing at Toronto\*. A number of universities feel that the weighting for science students is too low relative to that for students in other faculties. User requirement studies referred to earlier could be of use in establishing more appropriate weights but it may be that a formula based on different input data would produce a more equitable method. If, for example, student courses or subject students differentiated by subject (Biology, Classics, History, Physics, etc.) and by level were used as input data, the degree program in which a student is enrolled would become irrelevant. It may well be that, say, second year Physics courses are much more comparable from one university to another than, say, General Arts degree programs. The choice of input data is most important in any consideration of a permanent formula and further study seems indicated. A space-by-function type of formula such as that suggested in a recent CPUO document\*\* needs to be examined carefully as one possible solution.

### 4) Weighting - Third-Semester Students

The latest version of the Interim Formula recognizes the need for additional space to accommodate third-term students. It allows 24 square feet for one-half of the weighted enrolment in the third term. This is a most welcome change in the formula.

In separate submissions to DUA, the University of Waterloo (July 29, 1969) and the University of Guelph (May 4, 1970), presented their views on the appropriate weighting for cooperative students in the third semester. Both universities felt that additional space for classrooms and teaching laboratories was not needed for third-term students, and Guelph included also library space, but that other space needs did rise with third-term enrolment. A rough calculation indicates that the present

\* Figure 7 - Development of the Interim Capital Formula and the Application to the University of Toronto

\*\* I. W. Thompson: Guidelines for Facilities Planning and a Capital Formula, August 1970



allowance under the Interim Formula is just over one-third of what the two universities most directly concerned felt was needed.

Further study is required to establish more precisely the additional needs resulting from third-semester students. The recent inclusion of an entitlement for these students is a significant first step which should now be followed up.

#### 5) Weighting - Part Time Students

Another very worthwhile start has been made in the latest revision to the Interim Formula in providing entitlement for part time students. The formula now provides 24 square feet per student for the full time equivalent of part time weighted enrolment.

A number of universities have made representations to CUA or DUA on this subject, either orally or in writing (e.g., York submission of April 3, 1969, to the Chairman, CUA). There is a considerable spread in the weightings recommended but very roughly the allowance under the Interim Formula is of the order of one-third of the amount felt to be needed by the universities concerned.

Once again, further and more detailed studies are indicated but it is probably not possible to isolate precisely the additional space requirements arising out of part time students, and in the final analysis some element of judgement will be required. In developing the more permanent formula, consideration should be given to an input base which eliminates the need to distinguish between full time and part time students.

#### 6) Emerging Status

The Interim Formula now recognizes the special needs of those universities which have not yet become fully developed and hence are not able to utilize their facilities as effectively as the established institutions. The adequacy of this allowance is difficult to assess in any general way. Its adequacy for a particular institution will be very much a function of the nature of that institution, the manner in which it has planned to construct its campus and the degree to which its plans have been completed. This is a matter in which submissions from the universities concerned and a study of space by function related to size are likely to provide the best bases for judgment.

#### 7) Age, Efficiency, Renovation, and Renewal

The Interim Formula provides an inventory discount of thirty per cent for space in buildings forty years old or more. This is a



worthwhile beginning to the solution of a very complex problem. Physical facilities tend to become less efficient because of age, but at varying rates for different types of buildings, or because of change to new uses not originally anticipated, or because of bad design or planning, or because of remoteness from the centre of activity on a campus. There are likely many buildings at Ontario universities which are no more than ten years old but which when judged by new standards compatible with the interim formula are now functionally inefficient. Any building, however well designed, will require renovation periodically and there will be instances where it makes good sense to demolish and replace existing buildings. The renovation or replacement of old buildings at mature universities are problems not fully met by the interim formula. In the replacement of an old building at a mature institution no provision is made under the formula for alternative accommodation during construction or for the difficulties which may be encountered in replacing, say, a science building, at the average cost of \$55 per N.A.S.F., without the opportunity of averaging the high costs of this type of building against the lower costs of less complex facilities. It should be possible to structure a formula so that universities have the funds needed either to keep a building up to reasonably modern standards almost indefinitely, or alternatively by some combination of inventory discounts and accumulated renewal allowances to opt for demolition and replacement when a building has gone beyond its useful life. A completely satisfactory answer to this problem will not be found easily or quickly, but the necessary studies should be instituted so that progress can be made in this area. Adequate provision for renovation and replacement might, as a side effect decrease the pressure on universities to grow in size and complexity in order to retain some degree of flexibility.

#### 8) Regional Cost Disparities

The Interim Formula does not yet make any allowance for higher costs in certain areas of the Province. It is recognized that this is not a simple problem but techniques are available for determining regional cost differentials. CPUO understands that DUA is looking into this, commends this action, and awaits the outcome with interest.

#### 9) Lead Financing

There is general concern that the moneys which universities have been allocated for approved projects do not begin to flow sufficiently in advance of the scheduled date of completion. In most cases the amounts of money required are relatively small and are needed to cover initial site investigation work, preliminary design work, and the like. A provision of some moneys in advance of that now allowed seems necessary and we would suggest that 75 per cent of the consultants' fees for the project would be reasonable.





#### 10) Master Planning

At present costs associated with master planning as well as many other costs are expected to be covered by the 3 per cent contingency allowance. Most universities are finding it next to impossible to do this. It may be that master planning costs cannot be fitted into a formula approach but it seems worth considering as this on-going process is vital to the rational development of an institution and it would be most unwise to force universities to skimp in this area.

#### 11) Project-by-Project Approvals and Timing

One of the advantages of a formula approach is that it gives universities more freedom to plan and construct facilities, within the limit set by the formula, with a minimum of interference from outside agencies. This advantage can be more theoretical than real, however, if approval of individual projects is significantly delayed. Some of the delays experienced recently may have arisen in part because the system is in a state of transition - an almost perpetual state perhaps - and in part because of a lack of understanding on the side of the universities as to the precise conditions governing approval. This would seem to be a matter which requires further attention and clarification.

#### 12) Dining Facilities and Other Common Space

Universities which, for geographical or other reasons, must provide residence accommodations out of proportion to the ordinary must also provide dining facilities to serve these residences. Under present rules dining facilities and residence common rooms are considered part of the allocation inventory. Beyond this, further consideration should be given to the whole question of which types of space should properly be included in the allocation inventory.

#### Conclusion.

The Interim Formula has been and is a useful and effective device in the present transitional situation. It will be necessary to continue to use it for an additional year or two since much of the data required for testing possible new formulae is not available, or at least not available in corrected and readily accessible form, and many additional studies must be concluded before a more permanent formula seems likely. It would be unwise to prejudice the achievement of a really successful permanent formula by being unduly hasty. Because of the need to continue with the Interim Formula, we would emphasize again the requirement for an escalation factor in the unit cost allowance. The \$55 figure based on 1968 costs is now really only \$44.12 as of July 1970. We are asked to plan to 1975 by which time it will be worth only \$34.26 in 1968 dollars, if the recent trends in prices continue.





The universities must have some guide as to the escalation of the cost allowance if they are to plan sensibly.

The foregoing comments have been offered in the hope that they will suggest not only desirable changes in the Interim Formula but also factors to be considered in the development of a permanent capital formula for the provincially-assisted universities of Ontario.

#### SECONDARY SCHOOL PATTERNS

Changing Secondary School patterns seem to have had less effect in the Faculty of Arts than they have in the Faculties of Science and Engineering. The Faculty of Arts notes that students coming from High School tend, more and more, to have had less specialized education than in the past. It is fair to say, however, that this trend has not created any major problems.

The Faculty of Science finds it difficult under present arrangements to design courses that will logically follow the work done in High Schools. It is felt that until much closer liaison can be established between the teaching departments of the different High Schools sending students to Carleton, and the members of the comparable departments of the University, about the content and approach followed in the upper years of High School the problems created by changing patterns will continue to inhibit a smooth curricular transition.

Finally the Faculty of Engineering reports that changing Secondary School patterns are resulting in a situation where fewer students may be qualified to enter engineering programs as they are currently constituted, while at the same time a pattern of transfers from Community Colletes and other programs appears to be developing. These factors together will make it necessary for the Faculty of Engineering to design a more flexible entry situation.

#### INTAKE FROM OTHER THAN SECONDARY SCHOOLS

Out of approximately 2600 new admissions this year, 350 were transfer students from other universities, the largest single category going into Second year Arts. Approximately 80 students were admitted as Mature Matriculants, the majority enrolling in First Year Arts. Those who became full time students after taking courses at Carleton as part time students numbered 40 to 50. These students largely entered Second year Arts, the first year being completed while being part time students. Other post secondary institutions such as CAATs and CEGEPs supplied approximately 45 students, mainly to First and Second years.



### CHANGING STUDENT PREFERENCE

It is dangerous to make major changes in long-range planning because of apparent immediate changes in student preference that may turn out to be shortlived. There are, however, some current trends that have at least some significance for the future. At Carleton in the last two years, we have noted a strong proportionate rise in Arts enrolments. Science has continued to increase but at a very much slower rate.

Within the Faculty of Arts there has been a major shift of interest to the Social Sciences. Growth in the Humanities has continued but at a much lower rate than the surprising increases in Sociology, Anthropology, Political Science, Economics, Psychology, and Geography. There are indications that this year rate of shift has lessened. An interesting phenomenon this year and last year, probably partly due to the new First year free-choice policy, has been sharply rising enrolments in Accounting and Public Law courses. During the two previous years, Engineering enrolment rose modestly, but this year the total has increased by fifteen per cent.

### CHANGING JOB OPPORTUNITIES

Changing patterns of job opportunities are at present creating a lot of uncertainty both for the university and for the students. There seems to be inadequate information generally as to precisely what the patterns are, and how lasting what patterns can be discerned are going to be.

It is clear that patterns as they are perceived by students are having some effect on enrolments specifically, for example, in the lessening interest in science.

Large numbers of students seem to come to university without direct concern for patterns in job opportunities but rather with a concern for general education or for more specialized studies which do not directly relate to job opportunities. These figures make it even more difficult for the university to see ways to adapt planning to job opportunities for changes in student preference may be motivated by considerations unrelated to the labour market.

If it were possible for Governments and other public agencies to make better estimates of changing job opportunities then students might be able to make their academic choices with greater certainty and universities could plan accordingly.



## STUDENT ASSISTANCE AND TOTAL RESOURCES AVAILABLE

### RELATIVE PRIORITIES

The time has come for a thorough-going evaluation of the Ontario Student Award Programme as the main instrument of a policy to establish equality of educational opportunity. There is some evidence that the existing programme is regressive in that the poor are taxed to help educate the children from better off families, particularly with grants or non-repayable aid. Until more evidence is available on who gets what, non-repayable aid should be kept at its present per-student capita level for next year. If the demand for non-repayable aid from Provincial sources proves to be too great for present financial restraints and reported high levels of student summer unemployment then some principle of selectivity must operate and that would mean greater subsidies to children of lower income groups than to those with higher incomes. This would probably mean more for CAAT students than university students. Since the real problem of inequality of educational opportunity begins early in high school years any amount of aid to Grade 13 students who are a class biased group is bound to have a regressive element built in. It is necessary to publicize the student award programme more in the schools and to make it more genuinely a subsidy to the lower income groups.

The pattern of student assistance that finally emerges can come only after continued debate over and examination of new proposals such as the educational opportunity bank. At the moment too many people in the university community have serious reservations about the proposal in the Cock-Stager Report to be able to endorse it. However there are good grounds for re-examining the relative consumption and investment components in post-secondary education and the relative burden of cost that should be born by the individual and by the public. There are no easy answers. No doubt the Commission on Post-Secondary Education will be making recommendations in this area. We might also look forward to new federal government initiatives as part of the revisions of the federal provincial fiscal arrangements.

### PRIVATE VS PUBLIC SOURCES OF SUPPORT

Under current patterns, it is much easier for a student with means to have a university education than for one with little or no financial resources. Our hope is that any future developments will have the effect of improving the equality of opportunity. We believe that there should be no development in the future pattern that would tend to further handicap students with slender financial backing. On





the contrary, we believe that any new scheme should further assist such students. There may be a case for giving special aid to less well off students in a lower range of demonstrated merit than students with better financial resources.

We think that any limitation of total resources for higher education should be attained by agreed limitations on enrolments and more rigorous selection of students, and not by any financial pressures or differentiations.



## STUDENT HOUSING

### REQUIREMENTS DURING NEXT FIVE YEARS

Projections of the demand for residence accommodation on the Rideau River Campus have been made a number of times in the past, most recently in June 1967 and October 1968. These projections underestimated the demand for places in residences, mainly due to a more rapid rise in enrolment than was projected at the times the forecasts were made, but in part because of other factors more difficult to assess.

In October 1969 a new projection was made, including the St. Patrick's Campus as well as the Rideau River Campus, and using the enrolment forecast in the document Goals and Requirements to 1975 - October 1969 Revisions. The requirement for on-campus residence accommodation is shown in the Table I which follows. Table II compares existing and projected accommodation with demand. The projected accommodation in Table III indicates one way of meeting the demand and is subject to further study.

TABLE I

### PROJECTED DEMAND FOR RESIDENCE ACCOMMODATION

		Students from beyond Commuting Distance			Estimated Demand for Residence Places		
Year (Factor)	Enrol- ment	Total (0.35)	Men (0.66)	Women (0.33)	Men (0.50)	Women (0.75)	Total
69-70	7139	2500	1660	840	830	630	1460
70-71	8150	2850	1900	950	950	710	1660
71-72	9005	3150	2100	1050	1050	790	1840
72-73	9815	3450	2300	1150	1150	860	2010
73-74	10760	3750	2500	1250	1250	940	2190
74-75	11540	4050	2700	1350	1350	1010	2360
75-76	12330	4300	2860	1440	1430	1070	2500



TABLE II

COMPARISON OF DEMAND AND AVAILABLE ACCOMMODATION

Year	Required	Available	+ -
69-70	1460	1386	- 74
70-71	1660	1386	-274
71-72	1840	1386	-454
72-73	2010	1386	-624
73-74	2190	2236	+ 46
74-75	2360	2236	-124
75-76	2500	2536	+ 36

TABLE III

Existing Residences	Projected Residences
Glengarry (Men) - 634	St. Pat's (73-74) - 250
Grenville (Women) - 181	R. River (73-74) - 600
Lanark (Women) - 175	R. River (75-76) - 300
Renfrew (Coed) - 147	
Russell (Women) - 179	
St. Pat's (Men) - 48	
St. Pat's (Women) - 22	
1386	

METHOD OF DETERMINING NEED

The method used in projecting demand for on-campus residence accommodation has been empirical. Factors giving the fraction of out-of-town students in the full-time student body, the relative numbers of men and women, and the fractions of out-of-town men and women wanting residence accommodation were originally based on experience and assumptions. Since Carleton's first residence opened in 1964, the factors have been re-examined and modified on the basis of the most recent findings. For example, the fractions 0.50 and 0.75 used to project the numbers of men and women wanting residence accommodation were obtained by adding to the numbers actually in residence in October 1969, one half of the numbers on active waiting lists for residence places before dividing by the numbers of out-of-town men and women.



While this method may seem less convincing than more sophisticated analyses based on broader studies of housing in the community we believe it is a valid procedure. The factors which must be considered in assessing the need for on-campus places are many and the relative weighting to be assigned to each difficult to determine. The method above assumes that even in today's affluent society the numbers of students prepared to put down a twenty-five dollar deposit (fifty dollars at St. Patrick's) which is not refundable if they are offered a place and refuse it, is directly related to the real need for residence accommodation.

This year Carleton has 758 men and 630 women students in residence for a total of 1388. In addition, 679 men and 398 women or 1077 altogether are on the active waiting list. Thus, using the method described above, the estimated need for residence beds is  $1388 + \frac{1077}{2}$

= 1927 - considerably higher than the figure of 1660 for both campuses shown in the table. This indicates that the estimates in the table might well be raised by 16 per cent or so but we are reluctant to do this for two reasons. Firstly, because in making projections for the numbers of residence places required it is wise to be conservative. The entire capital and operating costs of the residences must be born by the students and vacant rooms in any significant number would have serious financial repercussions. Secondly, we have underway the housing study referred to below and we would prefer to have the results available before revising our earlier projection.

On-campus accommodation is only part of the picture since many students prefer to live off campus in a variety of kinds of living arrangements. Carleton has for years canvassed the City to produce and maintain lists of available off-campus places. It is not easy however, to make quantitative forecasts as to the need and likely availability of such accommodation on the basis of information presently in our files. Carleton's lists, together with those of the YM/YWCA, have been used by students of other post-secondary institutions in Ottawa and the institutional affiliation of the students occupying such places has not been recorded. No rating or assessment has been made of the suitability of listed accommodation for university students nor of the convenience for students attending Carleton.

It has been recognized for some time that a thorough study of the off-campus housing situation is needed and that the problem is only partly a Carleton problem. In August Carleton commissioned a firm of consultants to carry out such a study and has actively sought the co-operation and support of the other institutions affected. In the past, it has been assumed that the demand for on-campus accommodation is a reflection of the need for such accommodation and planning has been on that basis. When the consultants' report is completed, it should be





possible to plan on the basis of a more complete knowledge of what is now available and likely to be available in the future by way of off-campus housing.

EFFECTS ON DEVELOPMENT IF FUNDS ARE NOT AVAILABLE

The projects indicated in the earlier table would add 1150 student places to the on-campus accommodation at Carleton by 1975. If these places are not provided and if suitable alternatives are not available off-campus, presumably some or all of the 1150 students who would otherwise have enrolled at Carleton will not do so, thus slowing Carleton's rate of growth and the need for non-residential facilities. In the extreme, Carleton's enrolment might be reduced by about 9½ per cent in 1975-76, and the proportion of students in residence would drop from just over 20 per cent to just over 12 per cent of the full-time student body. One could study and perhaps refine the effect in terms of numbers of students but this is probably the least important effect. More important is the question of what the absence of places at Carleton will mean to those students who might otherwise have been accommodated. Of interest also is the question of whether a substantial reduction in the percentage of students in residence in any way decreases the quality or effectiveness of the educational experience for the student body as a whole.

The first question is primarily one for the provincial system or for a system-wide study. The second question is one which could be developed at length but the arguments pro and con are likely familiar enough that they can be taken as read.



ITEM 4

OTHER MATTERS



## OTHER MATTERS

### MISSION ORIENTED RESEARCH

Little research work is presently in progress which is not being supported by any of the large granting agencies. The chief "mission oriented research" that is in progress is to be found in the Science Faculty and in Division II of the Faculty of Arts. Although members of the Faculty of Engineering have undertaken such research in the past and will no doubt do so in the future, at present they are not involved with this type of work.

In the Science Faculty the Department of Chemistry has become more involved in such research over the past eighteen months, and projects are presently underway for the Canadian Patent and Development Corporation, The Inland Waters Division of the Department of Energy, Mines and Resources, and DuPont Company. Several other faculty members are negotiating contracts with the Canadian chemical industry and Government departments. The Physics Department has one project which might be categorized as mission oriented research. It involves radio-graphy, the uses of external gamma rays for density measurement and for imaging of internal structures in medical diagnosis.

There seems to be an increasing amount of mission oriented research being done in the Social Sciences. By way of examples to the nature of this research members of the Department of Psychology are carrying out studies of "Minimal Brain Damage" in cooperation with the Department of Pediatrics of the Ottawa Civic Hospital, and work on the "Early Education of Disadvantaged Children" in cooperation with the Fleck Child Centre and Protestant Children's Village. In the School of Public Administration three members of faculty are carrying out a study on "Objectives in Training Public Service Managers for the Public Service Commission". Mission oriented research in Sociology is being done on a variety of topics, including "national policies and Highly Qualified Manpower in Canada", "occupational aspirations of Arctic native peoples" and "effects of community structure on family structure".





POLICY ON THE OBLIGATIONS OF FACULTY MEMBERS

At Carleton the obligations of faculty members are not explicit, but are part of an implicit understanding. It is expected that individual faculty members will teach and assist students to learn in other ways, thus being reasonably available to their students; that they will continue to develop their own knowledge and their mastery of certain fields; that, as appropriate, they will add to knowledge and to the organization of knowledge through research and writing; that they will take due part in administrative and decision-making activities. We do not have rigid regulations or timing rules for the activities of faculty members. We believe that most faculty members work on the average more hours per month than most people in government and business.









